



The magical **bean** as some may call it is a large part of Idaho's agriculture economy. Idaho produces over 160 million pounds of **dry beans** a year. Most of Idaho's **dry bean** production comes from the south central region of Idaho.

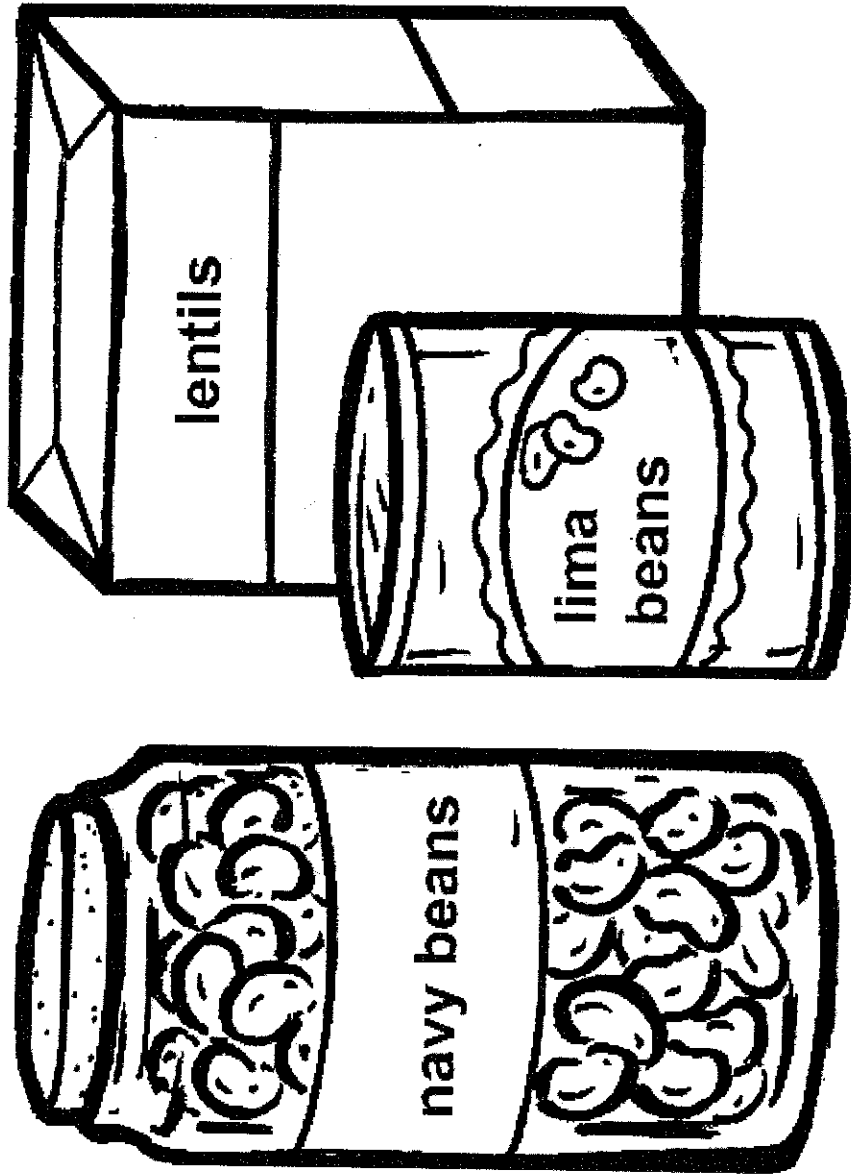
Idaho **bean** farmers grow 6 major varieties of **beans**. These varieties include Pinto, Garbanzo, Navy, Small Red, Great Northern, and Pink **beans**.

Idaho is ranked in the top 5 in the nation in **dry bean** production, with a crop value of over \$30 million per year. Idaho's **dry beans** are enjoyed all around the world, and are shipped both fresh and processed.

**Beans** are a very important part of a healthy diet, providing protein, fiber, calcium and iron and no saturated fat or cholesterol. In fact, dry **beans** and peas are the only foods that appear in two different food groups in the USDA's food pyramid!



beans





Cooking with Beans!

# BEAN FACTS

*What food is high in protein, has virtually no fat and has more fiber than most whole grain foods? The answer is beans! Now a new U.S. dietary guidance message says that "diets including beans may reduce your risk of heart disease and certain cancers."*

## DID YOU KNOW?

- ⌚ Beans are one of nature's healthiest foods – they are naturally low in total fat, contain no saturated fat or cholesterol, and provide important nutrients such as fiber, protein, calcium, iron, folic acid and potassium.
- ⌚ National and international expert bodies, including the National Research Council, the World Health Organization, the World Cancer Relief Fund, the National Heart, Lung, and Blood Institute, and the U.S. Surgeon General, have reviewed scientific evidence and concluded that eating beans can be an important ally in maintaining health and may reduce the risk of heart disease and certain cancers. Other studies suggest beans are useful in managing diabetes, may cut risk for high blood pressure and may help in losing weight.
- ⌚ The USDA recommends that adults eat more than three cups of beans each week for maximum health benefits – three times more than the current average American consumption.
- ⌚ The new bean dietary guidance message applies to more than a dozen types of dry beans (both dry-packaged and canned varieties), including:
  - Black-eyed -Great Northern -Pinto
  - Kidney -Black -Cranberry
  - Red -Limas and Baby Limas -Garbanzo
  - Navy
- ⌚ The top U.S. Bean-growing states (2004 estimates\*) are:
  1. North Dakota (475,000 acres)
  2. Michigan (185,000 acres)
  3. Nebraska (110,000 acres)
  4. Minnesota (100,000 acres)
  - 5. Idaho (78,000 acres)**
  6. Colorado (67,000 acres)
  7. California (65,000 acres)
  8. Washington (29,000 acres)
  9. Wyoming (24,500 acres)
  10. Texas (17,500 acres)

### Use Your Bean...

If You plant four beans in three pots of soil how many beans will you get from the plant?

Answer:  
a) 7-12  
b) 13-25  
c) 25-35

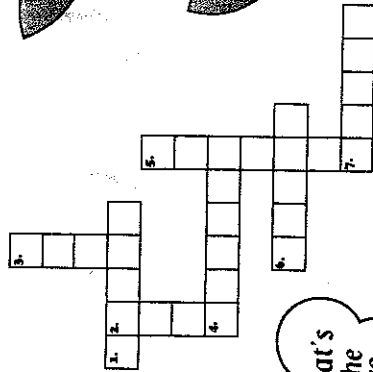
58-52 c) Jansky

### Can you find the words?

There are as many as seven words hidden inside of this puzzle.  
Can you find them?

A	B	L	I	G	Q
M	B	S	T	E	M
J	E	S	O	D	K
F	A	E	L	X	M
L	N	E	N	C	E
R	S	D	I	V	B

### A crossword puzzle



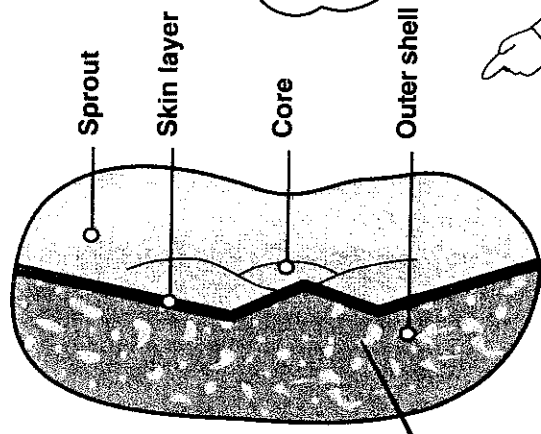
#### Clues:

1. This grows from a bean seed.
2. This grows from a stem.
3. This layer of the bean is called the \_\_\_\_\_.
4. When bean plants bloom they have a \_\_\_\_\_.
5. These people grow fields full of beans for you and me.
6. Irrigation gives bean fields lots of \_\_\_\_\_ to help them grow.
7. The \_\_\_\_\_ is the outer layer of the bean seed.

Answers: 1) Plant, 2) Leaf, 3) Skin, 4) Flower, 5) Farmers, 6) Water, 7) Shell.

Teacher, what's inside of the bean seed?

If you want to know what's inside of a bean...Then let's blast off the layers and find out.



Blast Off The Layers of a Bean

# The Bean Blastoff!

# The Magic of Beans!

## Challenge Your Bean

It takes lots of \_\_\_\_\_ to make beans grow.  
 Idaho is the bean \_\_\_\_\_ of the world!  
 A bean \_\_\_\_\_ is the first sign of growth from  
 a bean seed.  
 Beans belong to \_\_\_\_\_ food groups in the food pyramid.

Answers: SUN, CAPITAL, SPROUT, TWO.

## A Fun Activity

Idaho grows beans that are all different colors - some are **pink, red, white, black and speckled!**

Color the beans on Jack's vine pink, red, white, black or speckled, or paste on different beans found in the supermarket.

Make multi-bean soup with the left over beans. Ooo--good!!

How many beans did you color or paste on? \_\_\_\_\_

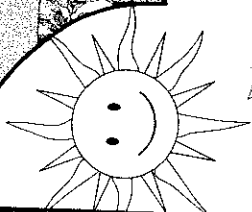
## It's A Snap To Grow A Bean!

1. Get a dry snap bean seed and soak it overnight in water.
2. Place the bean seed in cheese cloth, fold it over, and keep it damp until a sprout appears from the center of the seed.
3. Plant the seed in some soil, put it where it will get lots of sunshine, and keep it watered daily. Watch, and in about five days you'll have a Snap Bean plant magically growing before your very eyes!



# Idaho

## The Bean Capital of the World



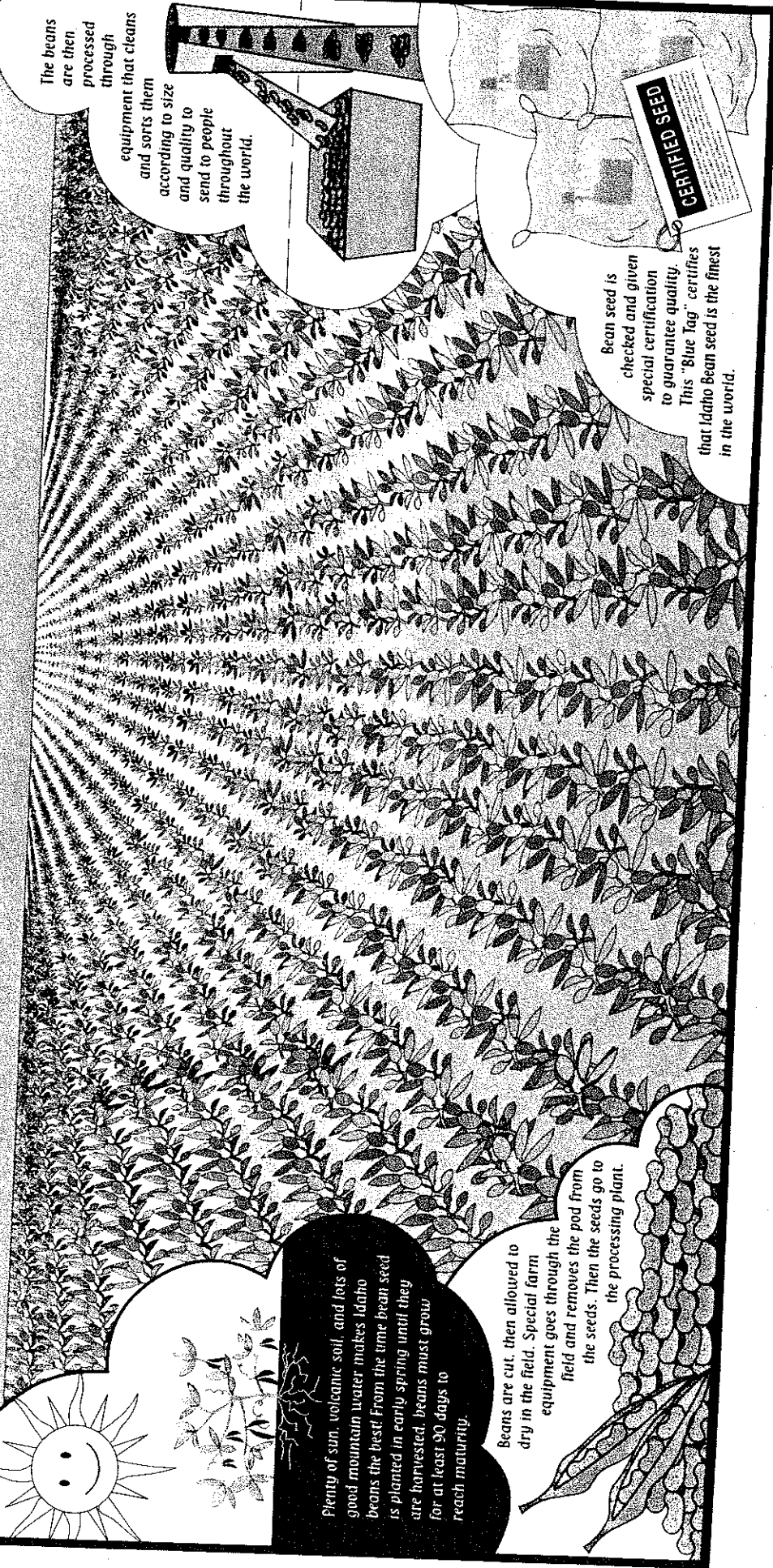
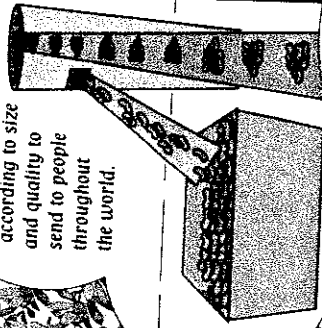
Plenty of sun, volcanic soil, and lots of good mountain water makes Idaho beans the best! From the time bean seed is planted in early spring until they are harvested, beans must grow for at least 90 days to reach maturity.

Beans are cut, then allowed to dry in the field. Special farm equipment goes through the field and removes the pod from the seeds. Then the seeds go to the processing plant.

Bean seed is checked and given special certification to guarantee quality. This "Blue Tag" certifies that Idaho Bean seed is the finest in the world.

**CERTIFIED SEED**

The beans are then processed through equipment that cleans and sorts them according to size and quality to send to people throughout the world.





# BEANS IN MYPYRAMID

Beans hold an important place in MyPyramid, the USDA's recommended eating plan for Americans. Because of their nutrient content, beans and peas are the only foods that appear in two different food groups in the pyramid. In fact, beans are recommended by MyPyramid for everyone, vegetarians and meat-eaters alike. Below are answers to common questions about how beans fit into MyPyramid.

## Why are beans listed in both the Meat and Beans Group and the Vegetable Group?

Beans fit into two groups because they have a nutrient profile similar to other foods in both the Meat and Beans Group and the Vegetable Group. Because they are a good source of protein, beans are listed in the Meat and Beans Group. Even better, unlike some other foods in this group, beans provide a low-fat, saturated fat-free, and cholesterol-free source of protein. And, because beans are a plant-based food that provide fiber, folate, potassium and antioxidants, they also are listed in the Vegetable Group.

## When do beans count as Meat and Beans and when do they count as Vegetables?

Beans are generally counted in either the Meat and Beans Group or the Vegetable Group – but not both. People who seldom or never eat meat, poultry and fish would typically put beans in the Meat and Beans Group. People who consume the recommended amounts of meat, poultry and fish would put beans in the Vegetable Group.

## What are the serving sizes and ounce equivalents for beans?

If beans are counted in the Meat and Beans Group, consider 1/4 cup cooked beans as a one-ounce equivalent of meat. If beans are counted in the Vegetable Group, consider 1/2 cup cooked beans as the equivalent of 1/2 cup of vegetables.

## How many servings of beans should I eat in a week?

For a 2,000 calorie daily diet, USDA recommends that people consume three cups of beans each week. That is about three times what the average American consumes today. (See [mypyramid.gov](http://mypyramid.gov) for recommended bean intake at other calorie levels.) There are lots of easy ways to add beans to the diet: on top of salads, mixed into soups, in Mexican dishes, or as a side dish instead of rice or potatoes.

## Why are beans sometimes referred to as dry beans?

"Dry beans" is the technical term for bean seeds that are allowed to dry in their pods until they are fully matured. The term "dry" does not refer to how the beans are packaged. For example, both canned pinto beans and pinto beans sold in a bag are considered dry beans. Common types of dry beans include pinto beans, navy beans, black beans and kidney beans. Green beans are not considered dry beans because they are harvested before maturity and thus have a different nutritional profile than dry beans. Green beans are part of the Vegetable Group but not part of the Meat and Beans Group.

Pinto beans are among the most popular dry beans in America. Below is a list of common bean types and the percentage of total U.S. dry bean consumption they represent.

Pinto Beans	46%
Navy Beans	12%
Black Beans	11%
Kidney Beans	7%
Great Northern Beans	6%
Cannellini Beans	4%
Small Red Beans	3%
Other Beans	11%

